

DIAGNOSING AND TREATING CANCER CELLS USING MUTANT VIRUSES

Abstract of the Disclosure

5 The invention provides methods for the identification of genes and their encoded
proteins involved in the susceptibility to proliferative disorders, including cancer, using
a tumor host range mutant virus (T-HR mutant). In addition, the invention provides
methods for the diagnosis of abnormally proliferating cells in a subject, using a T-HR
mutant. The invention also features, T-HR mutants that can be used to kill cancer cells
10 such as ones carrying a *Sal2* alteration. Furthermore, the invention features the analysis
of *Sal2* nucleic acids and proteins for diagnosing and treating patients having
proliferative disorders, including cancer, involving mutations in a *Sal2* gene and
encoded protein. Also encompassed by the invention are transgenic and knockout mice
including *Sal2* nucleic acids or proteins and mutants thereof.